

IN THE CLAIMS

Claim 1 (Currently Amended): Sizing composition for insulation products based on mineral wool, ~~especially glass or rock wool,~~ comprising an epoxy resin of the a glycidyl ether, type and an amine hardener, ~~characterized in that it furthermore~~ and further includes an accelerator ~~chosen~~ selected from imidazoles, imidazolines and mixtures thereof.

Claim 2 (Currently Amended): ~~Composition~~ The composition according to ~~Claim 2~~ Claim 1, ~~characterized in that the~~ wherein an accelerator is selected from imidazole, 1-methylimidazole, 2-methylimidazole, 2-phenylimidazole, 2-ethyl-4-methyl-imidazole, 4,4'-methylenebis (2-ethyl-5-methylimidazole) or 2-ethyl-N-phenylimidazoline.

Claim 3 (Currently Amended): ~~Composition~~ The composition according to ~~Claim 1 or 2~~ Claim 1, ~~characterized in that wherein~~ the epoxy resin is ~~obtained~~ prepared by the reaction of epichlorohydrin with an alcohol, ~~preferably a polyol.~~

Claim 4 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 3~~ Claim 1, ~~characterized in that wherein~~ the resin has an EEW (Epoxy Equivalent Weight) of between 150 and 2000, ~~preferably between 160 and 700 and better still at most equal to 300.~~

Claim 5 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 4~~ Claim 1, ~~characterized in that wherein~~ the epoxy resin has a water dilutability, at 20°C, of at least 500%, ~~preferably 1000%.~~

Claim 6 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 5~~ Claim 1, characterized in that wherein the hardener is ~~chosen~~ selected from aliphatic polyamines, such as diethylenetriamine (~~DETA~~), triethylenetetramine (~~TETA~~), tetraethylene-pentamine, (~~TEPA~~) and polyglycoldiamines, cycloaliphatic polyamines, such as 1,3bis (aminomethyl) cyclohexane, 4,4-diaminocyclohexylmethane, methylenediamine and 2,4-diaminocyclohexanol, and aromatic polyamines, such as m-phenylenediamine, m-xylylenediamine, diethyltoluenediamine, diaminodiphenylsulphone and dicyandiamine.

Claim 7 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 6~~ Claim 1, characterized in that it contains wherein the accelerator is in an amount of 0.1 to 5 parts by weight of dry matter per 100 parts by weight of dry matter of epoxy resin/hardener.

Claim 8 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 7~~ Claim 1, characterized in that wherein the hardener has an amine equivalent weight/H ratio of 20 to 300.

Claim 9 (Currently Amended): ~~Composition~~ The composition according to ~~one of Claims 1 to 8~~ Claim 1, characterized in that it ~~furthermore~~ which includes the following additives, per 100 parts by weight of dry matter of resin/hardener:

- 0 to 2 parts, ~~preferably around 0.5 part~~, of a coupling agent such as a silane;
- 0 to 20 parts, ~~preferably 6 to 15 parts~~, of an oil.

Claim 10 (Currently Amended): ~~Process~~ A process for manufacturing a thermal and/or acoustic insulation product, based on mineral wool, ~~in which~~ comprising the steps of:

- a) forming mineral fibres ~~are formed~~ formed are from a molten mineral composition;
- b) spraying a sizing composition according to ~~one of Claims 1 to 10~~ is ~~sprayed~~ Claim 1 onto the fibres obtained at a);
- c) collecting the fibres ~~are collected~~ in the form of a sheet; and
- d) subjecting the sheet ~~is subjected~~ to a heat treatment at a temperature below about 260°C, ~~preferably around 220 to 240°C~~.

Claim 11 (Currently Amended): ~~Process~~ The process according to claim 10, ~~characterized in that the~~ wherein an accelerator is mixed with the other constituents of the size before ~~being sprayed~~ spraying onto the fibres.

Claim 12 (Currently Amended): ~~Process~~ The process according to Claim 10, ~~characterized in that the~~ wherein an accelerator is applied separately from the spraying of the other constituents of the size onto the fibres.

Claim 13 (Currently Amended): ~~Thermal~~ A thermal and/or acoustic insulation product based on mineral wool, ~~especially glass or rock wool, provided~~ prepared with a sizing composition according to ~~one of Claims 1 to 9~~ Claim 1.

Claim 14 (Currently Amended): ~~Product~~ The insulation product according to Claim 13, ~~characterized in that~~ wherein the total weight of cured binder ~~represents~~ is from 0.5 to 15%, ~~preferably 1 to 12% of the total weight of mineral fibres~~.

Claim 15 (Currently Amended): ~~Product~~ The insulation product according to ~~Claim 13 or 14~~ Claim 13, characterized in that it furthermore which includes a veil of mineral fibres, ~~especially glass fibres~~, having a weight of between 10 and 300 g/m², placed on at least one of the external faces of the said product and in that the said veil comprises at least 1% by weight of cured binder obtained from the sizing composition. ~~according to one of Claims 1 to 9.~~

Claim 16 (Currently Amended): ~~Use of~~ A method using the sizing composition according to ~~one of Claims 1 to 9~~ Claim 1 for improving the mechanical strength after ageing, especially in a wet environment, of insulation products based on mineral wool.

Claim 17 (Currently Amended): ~~Use according to~~ The method of Claim 15, characterized in that wherein the wool is glass wool or rock wool.

Claim 18 (New): The composition of Claim 4 wherein the EEW has maximum value of 300.